

Claims:

1. Protein encoded by a nucleotide sequence selected from the group consisting of SEQ ID NO 1 and SEQ ID NO 2, or parts thereof, for use in medicine.
2. Antibodies directed against the protein encoded by a nucleotide sequence selected from the group consisting of SEQ ID NO 1 and SEQ ID NO 2, or antigenic fragments thereof for use in medicine.
3. Nucleotide sequence selected from the group consisting of SEQ ID NO 1 and SEQ ID NO 2, or parts thereof, for use in medicine.
4. A vaccine for the protection against diseases caused by *Salmonella enterica* subspecies I, comprising the protein, or parts thereof, encoded by the nucleotide sequence according to SEQ ID NO 1 or antibodies directed against the protein encoded by SEQ ID NO 1, or antigenic fragments thereof and, optionally, a pharmaceutically acceptable carrier.
5. A vaccine for the protection against diseases caused by *Salmonella enterica* subspecies I serovar Typhi, comprising the protein, or parts thereof, encoded by the nucleotide sequence according to SEQ ID NO 2 or antibodies directed against the protein encoded by SEQ ID NO 2, or antigenic fragments thereof and, optionally, a pharmaceutically acceptable carrier.
6. A nucleic acid vaccine for the protection against diseases caused by *Salmonella enterica* subspecies I, comprising SEQ ID NO 1, or parts thereof and, optionally, a pharmaceutically acceptable carrier.
7. A nucleic acid vaccine for the protection against diseases caused by *Salmonella enterica* subspecies I serovar Typhi, comprising SEQ ID NO 2, or parts thereof and, optionally, a pharmaceutically acceptable carrier.
8. A vector vaccine for the protection against diseases caused by *Salmonella enterica* subspecies I, comprising a host in which a recombinant vector comprising SEQ ID NO 1, or parts thereof, has been inserted and, optionally, a pharmaceutically acceptable carrier.

9. A vector vaccine for the protection against diseases caused by *Salmonella enterica* subspecies I serovar Typhi, comprising a host in which a recombinant vector comprising SEQ ID NO 2, or parts thereof, has been inserted and,
5 optionally, a pharmaceutically acceptable carrier.

10. A method for protection against diseases caused by *Salmonella enterica* subspecies I, comprising administering a vaccine according to any of claims 4, 6, and 8.

10 11. A method for protection against diseases caused by *Salmonella enterica* subspecies I serovar Typhi, comprising administering a vaccine according to any of claims 5, 7, and 9.

15 12. Antibodies directed against the protein encoded by a nucleotide sequence selected from the group consisting of SEQ ID NO 1 and SEQ ID NO 2, or antigenic fragments thereof, for use in a diagnostic method.

20 13. Protein encoded by a nucleotide sequence selected from the group consisting of SEQ ID NO 1 and SEQ ID NO 2, or parts thereof, for use in a diagnostic method.

25 14. Primers for or, probes that hybridize with a nucleotide sequence selected from the group consisting of SEQ ID NO 1 and SEQ ID NO 2, for use in a diagnostic method.